



US 20100195869A1

(19) **United States**

(12) **Patent Application Publication**
Geiss

(10) **Pub. No.: US 2010/0195869 A1**

(43) **Pub. Date: Aug. 5, 2010**

(54) **VISUAL TARGET TRACKING**

Publication Classification

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(51) **Int. Cl.**
G06K 9/00 (2006.01)

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(52) **U.S. Cl.** **382/103**

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(21) Appl. No.: **12/632,587**

(22) Filed: **Dec. 7, 2009**

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/363,604,
filed on Jan. 30, 2009.

(57) **ABSTRACT**

A visual target tracking method includes representing a human target with a machine-readable model configured for adjustment into a plurality of different poses and receiving an observed depth image of the human target from a source. The observed depth image is compared to the model. A refine-z force vector is then applied to one or more force-receiving locations of the model to move a portion of the model towards a corresponding portion of the observed depth image if that portion of the model is Z-shifted from that corresponding portion of the observed depth image.

